



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,707	03/09/2001	Michael Stefan Cox	Q63167	5115

7590 09/08/2005
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
WASHINGTON, DC 20037-3213

EXAMINER

LEZAK, ARRIENNE M

ART UNIT PAPER NUMBER

2143

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/801,707

Applicant(s)

COX ET AL.

Examiner

Arrienne M. Lezak

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. Examiner notes that Claims 1-3 have been amended, and no claims have been added or cancelled. Claims not explicitly addressed herein are found to be addressed within prior Office Action dated 30 November 2004 as reiterated herein below.

Claim Rejections - 35 USC § 112

2. Examiner notes that Claim 3 has been amended and is no longer an omnibus type claim. Thus, the rejection based on 35 USC § 112 is withdrawn.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of US Patent US 6,542,964 B1 to Scharber in view of US Patent US 6,788,692 B1 to Boudreau.

5. Regarding Claims 1-3, Scharber discloses a method of allocating traffic to paths between a sending node and a receiving node in a network, wherein each message includes a QoS flag, (Fig. 4), the method including:

- at the sending node, compiling a traffic status map of the available capacity on each practical path, (including at least one path available to traffic of different QoS levels – per pending Claim 3), between the sending node and the receiving node with capacity available to handle a message with a given QoS level, (Fig. 4 & Col. 10, lines 21-61);
- allocating said messages to one of said plural paths on the basis of its QoS flag, and the available capacity of the paths, with a message of higher QoS level having preferential access to said at least one path relative to a message having a lower QoS level, (Col. 5, lines 53-67; Col. 6, lines 1-32; Cols. 11-14 – particularly Claims 3, 19, 20, 42 & 43); and wherein the highest priority messages are allocated to the shorter paths with available capacity in preference to lower priority messages, the lower priority messages being allocated to longer paths as traffic conditions require, (per pending Claim 2), (Col. 9, lines 58-67 & Col. 10, lines 1-18).

6. Examiner notes that Scharber discloses an optimization, which optimization affects the selection of a cache query protocols and retrieval methods as influenced by a number of factors, including quality of service, (QoS). Scharber does not specifically indicate that said optimization utilizes QoS flags. Boudreau discloses method for network load balancing, which method teaches the use of QoS flags, (Boudreau - Fig. 3 & Col. 5, lines 31-54). The use of QoS flags within an optimization considering a QoS factor and maintaining a QoS database, (Col. 10, lines 33-52), would have been obvious to one of ordinary skill in the art at the time of invention by Applicant, as an

Art Unit: 2143

optimization influenced by QoS factors obviously requires means by which to identify, consider and apply the same. QoS flags are well-known in the art as a means by which to identify, consider and apply QoS, and as such, the QoS flags would obviously be used within the Scharber system.

7. Finally, Examiner notes that path allocation within Scharber is optimized, (Col. 9, lines 65-67 & Col. 10, lines 1-52) via content type and transport protocol, wherein it would have been obvious to allocate the highest priority messages to the shorter paths and lower priority messages to the longer paths, per QoS, (and other), requirements. Scharber further specifically enumerates an example for delivery of content using the fastest available path to avoid unnecessary delays in responding to requests, (Col. 9, lines 65-67 & Col. 10, line 1). Thus, Claims 1-3 are found to be unpatentable over the combined teachings of Scharber in view of Boudreau.

Response to Arguments

8. Applicant's arguments filed 2 July 2005, have been fully considered but they are not persuasive. Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made.

9. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208

USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Examiner maintains that the combined teachings of the references render Applicant's claims, as written, unpatentable.

10. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "two connection requests with different levels of QoS (different classes of service) competing for the same connection resources") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Additionally, Examiner notes that a load-balancer obviously, (if not inherently) will consider whatever parameters are set including but not limited to QoS level.

11. Examiner has addressed Applicant's Amendment, and has further rejected all claims, as noted herein above. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

12. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2143

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arrienne M. Lezak whose telephone number is (571)-272-3916. The examiner can normally be reached on M-F 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571)-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Arrienne M. Lezak
Examiner
Art Unit 2143d

AML


DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Application/Control Number: 09/801,707
Art Unit: 2143

Page 7